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NOTES: Examiner Interview Agenda Scheduled  
for Monday, March 9, 2009.

Best regards,Amir Tabarrok

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Patent

SONY-50R4614.CIP

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ota et al.

Application No.: 10/806,615

Filed: 03/22/2004

For: METHODS AND SYSTEMS FOR  
RAPID CHANNEL CHANGE WITHIN A  
DIGITAL DISPLAY SYSTEM

Examiner: Taylor Joshua

Art Unit: 4157

Conf. No: 2638

EXAMINER INTERVIEW AGENDA

Please find attached an Examiner Interview Agenda for Monday March 9, 2009. Please note multiple proposed claim amendments for Claim 1 are provided below.

Listing of Claims:

1. (currently amended) A method for displaying digital content comprising:
  - using a first tuner to access a first transport stream associated with a first frequency;
  - displaying in a main picture area of a display screen, a program associated with said first transport stream;
  - using a second tuner during spare periods to access a second transport

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stream associated with a second frequency;

decoding digital content from said second transport stream and caching said digital content into a memory buffer while said program associated with said first transport stream is being displayed in said main picture area of said display screen; and

upon said first tuner being switched to a new channel associated with said program information stored in said memory buffer, recalling said digital content from said memory buffer for use in providing a fast channel change operation to said new channel.

1. (currently amended) A method for displaying digital content comprising:

using a first tuner to access a first transport stream associated with a first frequency;

displaying in a main picture area of a display screen, a program associated with said first transport stream;

using a second tuner during spare periods to access a second transport stream associated with a second frequency;

decoding digital content from said second transport stream and caching said digital content into a memory buffer; and

upon said first tuner being switched to a new channel associated with said program information stored in said memory buffer, recalling said digital content

from said memory buffer for use in providing a fast and seamless channel change operation to said new channel.

1. (currently amended) A method for displaying digital content comprising:
  - using a first tuner to access a first transport stream associated with a first frequency;
  - displaying in a main picture area of a display screen, a program associated with said first transport stream;
  - using a second tuner during spare periods to access a second transport stream associated with a second frequency, wherein said second tuner is operable to scan a plurality of channels in a round robin fashion;
  - decoding digital content from said second transport stream and caching said digital content into a memory buffer; and
  - upon said first tuner being switched to a new channel associated with said program information stored in said memory buffer, recalling said digital content from said memory buffer for use in providing a fast and seamless channel change operation to said new channel.

#### REMARKS/ARGUMENTS

In response to Applicant's argument, the rejection asserts that Claim 1 does not recite explicitly the condition that only one memory component may be used. Proposed amendment of "recalling said digital content from said memory

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buffer for use in providing a fast channel change operation to said new channel" further clarifies that the recalled digital content is from the same memory buffer used to cache the digital content.

In contrast, Reitmeier discloses using a frame buffer to store a single video frame (see Reitmeier, col. 5, lines 9-10). Reitmeier further discloses using a memory component to retrieve the I-frame associated with the desired new channel (see Reitmeier, col. 9 line 64 to col. 10 line 3). The frame buffer used to store a single video frame is different from the memory component used to retrieve the I-frame (see Reitmeier, Figure 1, elements 34 and 55). As such, Reitmeier fails to teach or suggest decoding digital content and caching the digital content into a memory buffer and upon the first tuner being switched to a new channel associated with the program information stored in the memory buffer, recalling the digital content from the memory buffer in the claimed fashion because the frame buffer and the memory component of Reitmeier are different.

Reitmeier fails to teach or suggest recalling the digital content for use in providing a fast and seamless channel change operation to the new channel, as claimed. For example, Reitmeier discloses that in the channel changing mode, format converter utilizes display frame buffer to store a single video frame while the tuner/demodulator pair associated with the main transport tunes/demodulates the new channel (see Reitmeier, col. 5, lines 7-12). The output signal represents

a freeze-frame image of the stored frame (see Reitmeier, col. 5, line 12). Thus, during the channel changing mode, a frozen-frame image is displayed, as disclosed by Reitmeier. As such, Reitmeier fails to teach or suggest recalling the digital content for use in providing a fast and seamless channel change operation to the new channel, as claimed.

Reitmeier fails to teach or suggest decoding digital content from the second transport stream and caching the digital content into a memory buffer while the program associated with the first transport stream is being displayed in the main picture area of the display screen, as claimed. The program, as claimed, comprises a plurality of frames. In contrast, Reitmeier discloses that during the channel changing mode, a frozen-frame image is displayed, as presented above. A frozen-frame image, as disclosed by Reitmeier, is partial display of the video stream, e.g., a frame image. As such, Reitmeier fails to teach or suggest decoding digital content from the second transport stream and caching the digital content into a memory buffer while the program associated with the first transport stream is being displayed in the main picture area of the display screen, as claimed.

Reitmeier fails to teach or suggest that the second tuner is operable to scan a plurality of channels in a round robin fashion, as claimed. For example, Reitmeier discloses that the auxiliary processing portion of the receiver

repeatedly tunes, demodulates and decodes some or all of a group of 4 channels identified in the scan list (see Reitmeler, col. 3, lines 21-23). Accordingly, Reitmeler fails to teach or suggest that the second tuner is operable to scan a plurality of channels in a round robin fashion, as claimed.

Claim 9 recites a third tuner, as claimed. Fries fails to teach or suggest a third tuner, as claimed. For example, Fries discloses a first tuner and an optional second tuner (see Fries, paragraph 77 and see Figure 3, element 300 and 302). The rejection asserts that Fries discloses that each tuner represent one or more tuners. Applicants respectfully disagree because Fries discloses that these two tuners are representative of one or more in-band tuners (see Fries, paragraph 77). As such, Fries fails to teach or suggest a third tuner to access a third transport stream associated with a third frequency, as claimed.

Respectfully submitted,  
MURABITO, HAO & BARNES LLP

Dated: \_\_\_\_\_, 2009

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